TeleNav v4.7

GPS Navigation Suite for Cingular®

BlackBerry 7130 and 8700™ Java Handhelds for GSM/GPRS/EDGE Networks

User's Guide

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1. Welcome

TeleNav™ 4.7 utilizes the Java™ programming environment and access to your carrier's data network for the Research in Motion BlackBerry 7130 or 8700. The TeleNav application also requires an external Bluetooth GPS receiver for determining your current location. TeleNav features:

- GPS navigation that punctually guides you turn-by-turn to any destination address in the Continental US. If you miss a turn or get off-track, TeleNav will calculate a new route for you. You can enter one or more destination addresses by calling an automatic voice recognition system, entering them on the TeleNav website, keying them directly into the handheld or by pulling them directly from the BlackBerry Address Book. Optionally, you can input a remote origin and receive Driving Directions from that origin address to the selected destination address.

- A Business Finder feature that allows you to find businesses or points of interest near your current location, around a waypoint, around an entered address, or around an airport. You can call the business first to check availability of an item, or get a reservation, and then navigate to it; or you can save the address for use later in the day.

- Maps of the area around your current location; a marked waypoint; or an address you enter manually, or have previously entered. You can pan (adjust left/right or up/down) the map, and zoom in or out. You can also mark a point under the cursor as a waypoint.

- A viewer that displays your current location relative to a selected waypoint and to navigate relative to that selected waypoint.

- The ability to mark the current location as a waypoint that can be labeled.

- A compass-like indicator presenting your direction of travel, location, and speed.

- The ability to personalize the application by selecting the use of US customary or metric distance units, volume and backlight level, timing of displayed graphics, etc.

TeleNav's servers support these enhanced services via the carrier's data network.

2. Safety and Legal Notices

Please read this section carefully before using TeleNav

TeleNav will not accept any responsibility whatsoever for accidents resulting from failure to observe common sense precautions. Your personal judgment, traffic regulations, and common sense must always take precedence over any driving direction produced by TeleNav.

WARNING: Keep your eyes on the road.

It is your responsibility as the vehicle operator to keep your eyes on the road and be an alert driver at all times, ESPECIALLY when the vehicle is moving. The vehicle operator should not be distracted by the application displays, audible cues, or manually interacting with the controls. When you need to enter data on your handheld using the keypad or study the display, please do so while the vehicle is parked, not while in motion. Should your ability to drive responsibly be decreased, please turn off the device.

WARNING: Install the equipment safely.

If you are using a handheld mounting kit, make sure that it does not obscure your vision. You may wish to charge the handheld while using TeleNav. If so, make sure the charging cable does not interfere with any of the vehicle controls.

WARNING: Drive safely and use common sense.

The vehicle operator's personal judgment, traffic regulations, and common sense must always take precedence over the instructions provided by TeleNav.

It is your responsibility as the vehicle operator to drive safely, observe all traffic rules and above all use your own personal judgment while driving. If you feel that a route suggested by the navigation software instructs you to perform an unsafe or illegal maneuver, places you in an unsafe situation, or routes you into an area which you consider unsafe, do not follow the instructions.

3. Getting Started with TeleNav

The TeleNav application that resides within your BlackBerry requires a TeleNav subscription and means of accessing the public Internet. Consult the TeleNav GSMBB Quick Start Guide for more information.

TeleNav Account

You can establish a TeleNav account by visiting http://www.telenav.com.

Software Installation

TeleNav can be downloaded directly onto your BlackBerry using the Internet Browser that is installed on your BlackBerry.

NOTE: This approach may take 5-30 minutes depending on the wireless network.

1. Launch the Internet or BlackBerry browser, and click the track wheel to expose the menus. Select "Go to…".

2. Input the OTA download link: **//ota.telenav.com/ota/tn**. Click the track wheel again and select OK.

After the download process has completed successfully, locate the TeleNav application icon on the handset menu.

Network Access

TeleNav uses the public Internet to access its servers for mapping, routing, and search services from your handheld device. There are three different network settings for you to select from. Wait 90 seconds after turning your BlackBerry on to allow these services options to register.

BIS

TeleNav recommends using BlackBerry Internet Service (BIS) as it will allow you to access the Internet even while roaming. To verify the required service book is present, and/or to add it:

- Go to the BlackBerry home screen by pressing the Escape button on the side a few times.
- Highlight **Settings**, and click the trackwheel button.
- Highlight Options, and click the trackwheel button. Highlight Advanced Options, and click the track wheel button.
- Go to Service Book and click the trackwheel button. Verify that the BlackBerry Internet Browsing Service (BIBS) book is enabled.
- If the BIBS book is not available, Escape back to Options and highlight Host Routing Table (HRT), then click the trackwheel.
- Click the trackwheel on the HRT Editor menu and select Register Now. After the registration is complete check the Service Book menu and verify that BIBS is provisioned.
- If this activity does not result in the BIBS service book being provisioned, contact your carrier's technical support team at the number provided below, or use one of the options that follow.

TCP

If you are not using your BlackBerry for e-mail services you will need to add a data plan to your billing account. You can add either an individual BlackBerry e-mail plan, or simply a network data plan. You will need to contact your carrier's technical support team to add this data service, and to confirm the Access Path Name (APN) gateway is active.

MDS

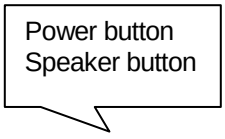
If you are using your BlackBerry for corporate e-mail via a BlackBerry Exchange Server (BES), then you should consult your IT department BES administrator about allowing you to use Mobile Data Service (MDS) as a means to access the Internet. Your BES administrator will have to enable MDS.

Bluetooth Pairing

This step is required to register the Bluetooth GPS receiver with the BlackBerry so that TeleNav can access the receiver to get location fixes.

- Turn on the GPS receiver.
- Press the Escape button repeatedly to reach the BlackBerry main menu.
- Go to **Settings**, then **Options**. Highlight **Bluetooth** and click the trackwheel.
- If Bluetooth is disabled, click the trackwheel and select **Enable**.
- Highlight **Add Device** and click the trackwheel once.
- Enter the GPS receiver passcode if required. The passcode for a TeleNav GPS receiver is "0000".
- Press the Escape key until you return to the BlackBerry main menu.

4. The BlackBerry 8700 Controls



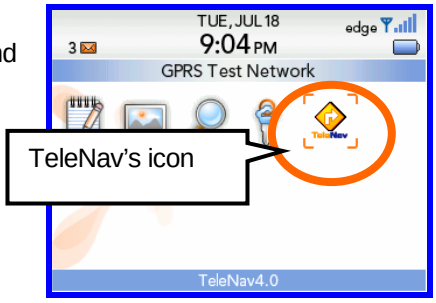
5. The BlackBerry 7130 Controls

Power button
Speaker button

The layout and screens shown below are correct for the 8700 and the 7130 layout is similar, but more compact. Differences in the keyboards impact some of the application interactions, and are discussed below.

6. Launching TeleNav

If you are using an icon theme, to launch TeleNav on your handheld, highlight the TeleNav "turn ahead" icon on the BlackBerry home screen, and press the trackwheel.



If you are using a list theme, scroll down to Applications, and enter the applications menu. Then scroll down to "TeleNav 4"

After starting TeleNav, the banner screen will appear for a few seconds.

You must grant TeleNav access to the network so it can authenticate your account, fetch maps, get navigation routes, and search for businesses.

When you see the challenge to the right, or the one below, use the trackwheel to highlight the checkbox allowing TeleNav to have access to all connections. Then scroll down to "Allow this Connection", and press the trackwheel to continue. If you click on "Deny this connection", TeleNav subscription functions will not function. You will have to reset the BlackBerry's firewall to allow you the opportunity to correct choosing "Deny this Connection".

You may need to click "Allow this Connection" twice for it to take effect.

The application TeleNav has requested a http connection to: atp4sd00444ne04
Don't Ask This Again For:
All http connections
http connections to atp4sd00444ne04
Allow this connection
Deny this connection

NOTE: Your BlackBerry Enterprise Server™ administrator can set network access policies to challenge TeleNav's attempting to establish a network connection, or deny it altogether. If you are using MDS, make sure your administrator configures the BES to enable MDS for your BlackBerry PIN.

The application TeleNav has requested a socket connection to telenav40.mypna.com
Don't ask this again for:
[ ] all socket connections
[ ] socket connections to telenav40.mypna.com
Allow this connection
Deny this connection

You will then be asked to set your language preference settings. Your choice will directly effect the language displayed through-out the application and the audible directions.

TIP: The Locale settings can be subsequently modified in the Preferences menu.

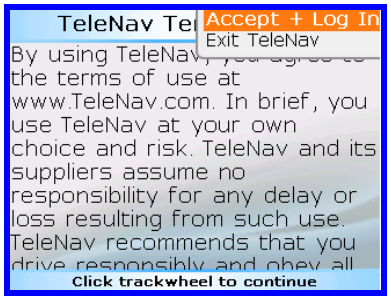
Terms of Use

Next, in order to continue the TeleNav registration process, you must agree to the Terms Of Use.

TeleNav Terms of Use
By using TeleNav, you agree to the terms of use at www.TeleNav.com. In brief, you use TeleNav at your own choice and risk. TeleNav and its suppliers assume no responsibility for any delay or loss resulting from such use. TeleNav recommends that you
Click trackwheel to continue

Click the trackwheel and select **Accept + Log In** to continue.

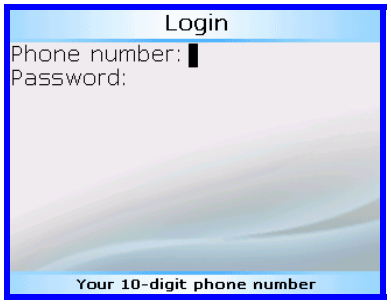
NOTE: If you do not want to accept the TeleNav Terms Of Use, press the trackwheel and select "Exit TeleNav."


Accept + Log In
Exit TeleNav
the terms of use at www.TeleNav.com. In brief, you use TeleNav at your own choice and risk. TeleNav and its suppliers assume no responsibility for any delay or loss resulting from such use. TeleNav recommends that you
Click trackwheel to continue

Registration

The next screen will collect your TeleNav account number and Password (also referred to in this documentation as PIN number). Use the trackwheel to move the cursor between the fields.

Your account number MUST be the same as your complete wireless phone starting with the area code (but not the "1" used for long distance dialing). Your PIN number can be a combination of any four digits.



When you have finished entering the required fields, press the trackwheel and proceed by selecting **Submit**.

During your first use of **TeleNav**, the handset will download the audible and graphical content needed to build the displays and produce audible messages. The alert screen similar to that shown on the right advises you that this is taking place.

NOTE: Do not interact with the BlackBerry while this download is in progress. Wait for it to finish. When the download is completed, you will see the TeleNav Home Menu.

NOTE: If after you press the trackwheel, the TeleNav application indicates that it *cannot* reach the TeleNav servers, the most likely reason is that your carrier data service plan is not yet active.

From time to time, TeleNav may update audible or graphical content, and will advise you accordingly. When the download is completed, TeleNav will display the activity screen to the right while TeleNav places the information into its archive.

NOTE: If your TeleNav account is not active, you will be notified at this point and will be directed to go to www.telenav.eu to extend your service agreement. You will not be able to progress beyond this point until your account is returned to current status. You may also see an important message from TeleNav regarding upgrades, scheduled downtime, pending account expiration, etc.

When the handheld reaches the TeleNav servers with a valid and active phone number and PIN, the handheld will be registered to use TeleNav, and will not present any of the above screens except the splash screen in the future. Visiting www.telenav.com and changing the PIN will require you to repeat the above registration process.

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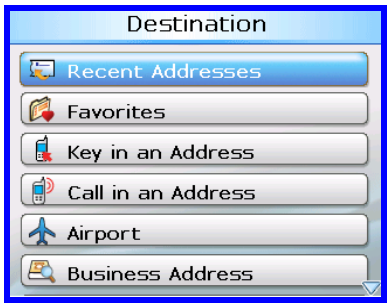
7. Addresses

This section discusses the variety of ways you can select a previously entered address, enter a new one, or use a Business or Airport Address. This information is presented here since the techniques for setting addresses are used throughout TeleNav.

TeleNav presents a list of options for you to choose from when a) setting a destination address, b) setting an origin address, c) defining the center of a displayed map, or d) anchoring a Business Finder search. These options include: a) using a Recent Address, b) a Favorite Address, c) entering an address from the keypad, d) calling in the address using the voice entry system, e) using an airport's address, f) using the address of a business and g) retrieving an address from the BlackBerry Address book.

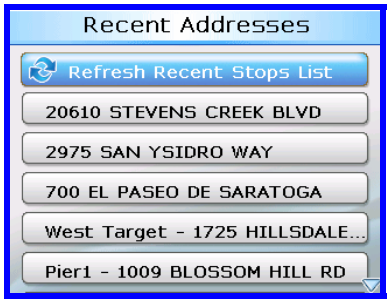


Recent Addresses

Recent Addresses are addresses used recently for navigation, directions, business finder searches, or mapping. When the 26 item capacity of the list is exceeded, the newest stop pushes the oldest off the list. When a stop in the list is used within TeleNav, it is promoted to the head of the list.

Use "Refresh Recent Stops List" to pull in any addresses you entered using the www.telenav.com Preplanning feature.

Items can be deleted from within the GPS Tools menu selection.


Recent Addresses
Refresh Recent Stops List
20610 STEVENS CREEK BLVD
2975 SAN YSIDRO WAY
700 EL PASEO DE SARATOGA
West Target - 1725 HILLSDALE...
Pier1 - 1009 BLOSSOM HILL RD

Favorites

The Favorites list appears to be similar to the Recent Stops list. Favorite addresses are expressly marked to be saved, and should be labeled. When the 26 element capacity of the Favorites list is exceeded, the least recently used address in the list is replaced by the address being added, and the preceding order of the list is preserved.

Update the list periodically to avoid an address you want to keep from being replaced. Many TeleNav users enter their home and work addresses in the Address Input Form shown above with a label, and then check the Save to Favorites option so they can easily reuse the addresses later.

TIP: Favorites is where you can label and keep your Home, Work, Health Club, and other addresses.

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Keying in an Address

The form allows you to specify a street address such as “123 Johnson St,” or an intersection as “Johnson at Main.” Note the use of AT or AND when entering crossing streets. There is provision for an optional Name (a label), such as “mikes office.” The label field ignores certain punctuation symbols.

TIP: Entering a City or Postcode is mandatory. With the street address omitted, the use of city or postcode will specify a point in the center of the selected locale.

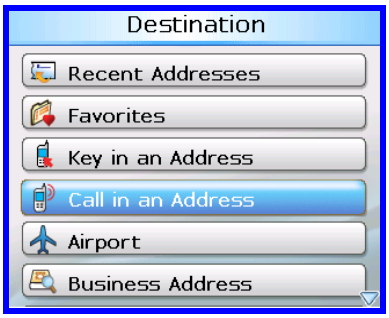
Use the Enter key or trackwheel to advance down the rows of the form. When you press Enter and the entry caret is in the Label field, the content will be submitted to the TeleNav servers for validation. The same is true when you select Submit on the trackwheel menu.

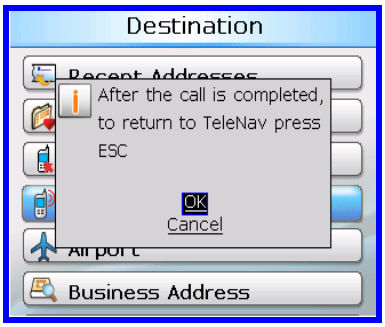
TIP: Coaching for the use of each row is available using the trackwheel menu Help selection.

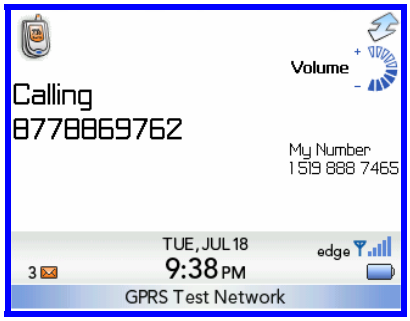
TIP: You can advance through this form after entering data using the Enter key. Power users often use the Enter key to progress through the application, and the trackwheel to make selections. Other power users navigate principally using the trackwheel.

Voice Address Input

The auto voice entry system in TeleNav can be utilized two different ways, 1) before starting TeleNav, call the Voice Address Input System at 408-523-1429 or 877-886-9762, and dictate your address as prompted or 2) select the Call in Address option on the Destination address entry screen as shown below. After you have entered the address, end the call and launch TeleNav or press ESCape to return to the TeleNav menu. Then Refresh your recent address list to find the address.







Below is a sample of what you will hear and say:

TeleNav prompt> Welcome to TeleNav! Say the city and state you want like San Francisco, California.

Your response> Arlington, Texas

TeleNav prompt> I heard Arlington, Texas. To change this say GO BACK. Say the street you want like WILSON AVENUE, or say Highway and the route number like Highway 405.

Your response> Oak Street

TeleNav prompt> I heard Oak Street. To change this say GO BACK. Say the street number or say INTERSECTION to name a cross street.

Your response> 1620

TeleNav prompt> I heard 1620. To change this say GO BACK.

<pause>

TeleNav prompt> Address entered. Please launch TeleNav on your phone

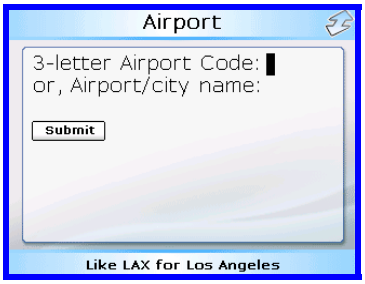
<call is terminated>

The Voice Address Input System may ask you for account number and PIN if caller ID is not working. Simply dictate the numbers as prompted, or key in your mobile phone number followed by pressing "#," and your TeleNav PIN followed by pressing "#." If this happens, consider using **Preferences**, **Voice Number** to change to the other dialed number.

The recognition system may reply back with an incorrectly recognized input. When this happens, simply say, **"Go Back,"** and repeat the data entry. The voice system may advise you that a street number is out of range and provide the proper range of numbers for you to use. Provide a number that is within the range or nearest the end of the range that you are sure is valid. If you say **Intersection** and then provide a crossing street name, the voice system may advise you that the streets you provided do not actually cross and allow you to change either street name, or both street names. Select the name you want to change by saying it, and then provide the correct name.

Using an Airport as an address

Click on **Airport** in the Address Selector. There are two input fields, one for the airport code, such as SFO for San Francisco International Airport; and one for the airport name, location city or market city prefix.



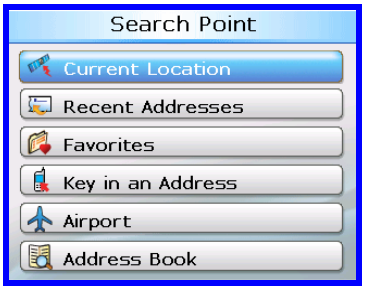
If you enter "NEW" in the field, the server will produce a list of airports in NEW York City; NEWark, NJ; NEW Orleans; etc.

You simply highlight the one you want, and press the trackwheel to submit it.

Using Biz Finder to find a business address

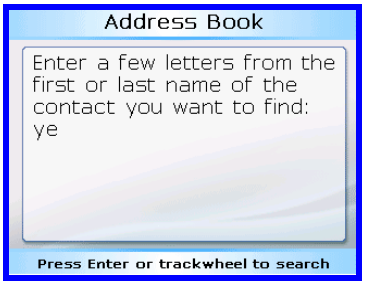
See the section regarding the **Biz Finder** feature for more detailed information. To use **Biz Finder** to set an address: a) specify the search point or area first, b) decide whether you want to search by Business Name or Gas By Price, c) navigate through the categories if you selected Business search until you have reached the list of matching businesses, d) select a specific business, and e) use the trackwheel to display a list of options.

You can select to save the address, or use it in the current application context. For example, if you are trying to get a Map, you can use Finder to get a business address, and then get a Map around that address.

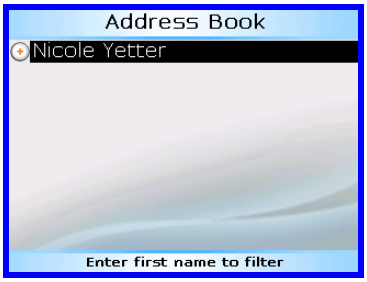


Address Book

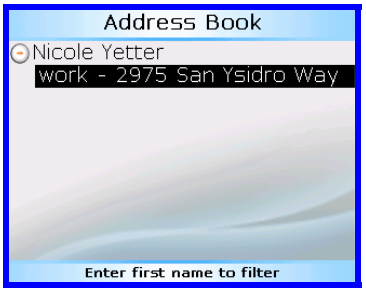
When you select Address Book, TeleNav examines the BlackBerry Address Book for contacts that have addresses. TeleNav then prompts you to enter the first few letters of either the first or last name of the contact you want to find.


Address Book
Enter a few letters from the first or last name of the contact you want to find:
ye
Press Enter or trackwheel to search

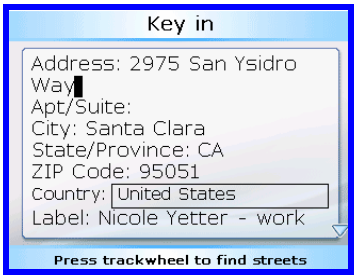
After completing the search for the contact that matches the given criteria all of the matching results will be displayed. On the left side of the name is a "+" symbol that you can click with the trackwheel to expose either the home or work address, or both.



Select the specific address you want, and press the track wheel.



The address content is passed to the Address Input Form so that you can edit it when TeleNav cannot validate it as it was found in the Address Book. Edits are not passed back to the Address Book.



8. Using TeleNav

The TeleNav Menu

The TeleNav Menu selections are a) GPS Navigation, b) Biz Finder, c) Maps, d) GPS Tools, e) Preferences, and f) Support.

You Exit TeleNav from this menu by pressing the ESCape button. You can return to TeleNav Home using the trackwheel menu from elsewhere within TeleNav.

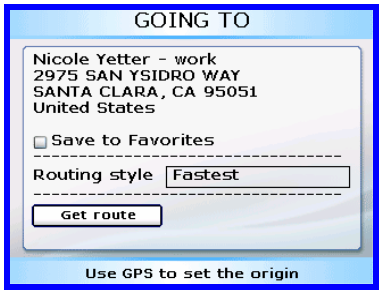
Navigation and Directions

Upon entering GPS Navigation, the destination Address Selector form described above appears first. You select, find, or enter an address, and are taken to the destination address confirmation screen.

On the confirmation screen, mark "Save To Favorites" using the SPACE key and the address will be saved in the Favorites list after it is validated.

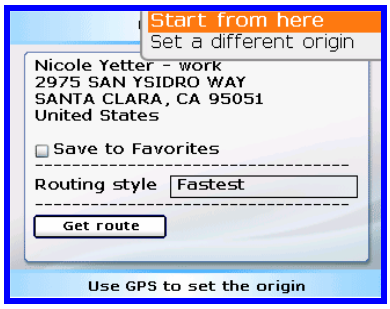
You can change the route type (fastest, shortest, etc.) using the SPACE key to toggle through the choices.

When you are ready to get the route, highlight "Get route," and press the trackwheel or Enter for a menu of options.



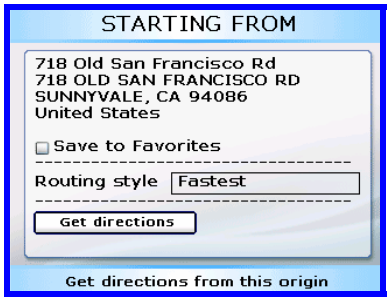
The first option is "Start from here," and the second option is "Set a different origin."

Selecting the first option invokes the **Navigation** function using your current location determined by getting a GPS fix as the origin. There will be brief activity to get an up-to-the-minute GPS location fix, followed by a network transaction while the handheld sends the fix and destination address to the TeleNav servers that respond with the routing data.



Selecting the second option takes you to the origin Address Selector so you can pick, find, or enter the origin address. (These screens are shown above). You will then be taken to the origin address confirmation screen shown on the right.

On the confirmation screen, use the SPACE key to mark "Save To Favorites" so the Origin address will be saved in the Favorites list after it is validated. You can also change the routing style by pressing the SPACE key. Then, highlight "Get directions," and press Enter or the trackwheel to get the directions.



GPS Origin Refinement

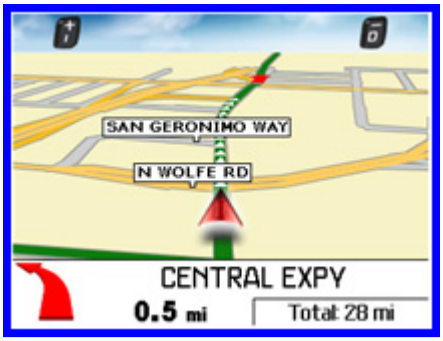
If are using GPS Navigation and you are in a parking lot or similar area where your location does not exactly map to a specific street, you may see a pop-up that shows TeleNav's best estimate of which street you are on, and allows you to change it. If you elect to change the starting street, a list of neighboring streets will be presented, and you can make an alternate selection from the list. If you do nothing, the first pop-up will disappear after a few seconds. If you are close to no street, TeleNav will ask you to move closer to a roadway before it provides a route.

Guidance Instructions

Within a few seconds, TeleNav will contact the TeleNav server, obtain an optimal route to your destination, and display the first instruction telling you how to start your trip from your current location.

NOTE: Unless you are moving, GPS will not provide TeleNav with your direction of travel. If this is the case, the first few guidance instructions may be incorrect since TeleNav may make an incorrect assumption. However, once you start moving, TeleNav will learn your direction of travel and provide a corrected set of guidance instructions.

3D Map View



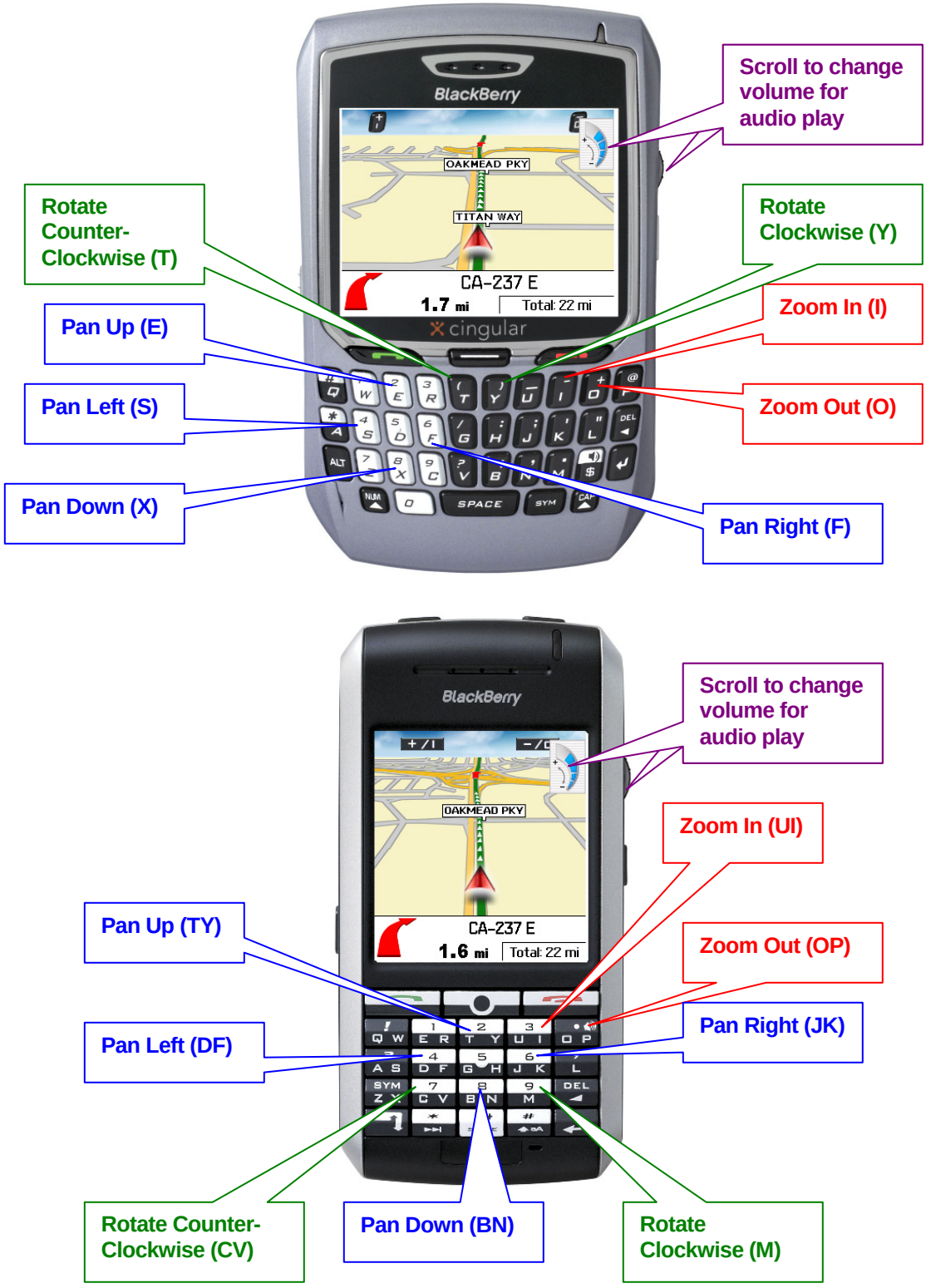
This is the default view in TeleNav, but it can be changed in Preferences.

This view allows you to see how the road ahead is organized, similar to the perspective of a bird flying 50 feet above the route. You can see the route to your destination as a green overlay on one of the roads with white triangles leading your in the correct direction.

The name of the street you are currently on is displayed at the bottom of the screen. About two minutes before the next turn, the street name changes to the one you will turn onto. You can change this option in Preferences so that immediately after the prior turn, the name becomes that of the street you will turn onto.

You can change to a different map view by clicking the trackwheel to bring up the menu.

In 2D and 3D moving maps, you can **zoom** in or out while doing run-time navigation. You can also **pan** the map up, down, left, or right and also rotate the map clockwise or anti-clockwise. If you pan or rotate out of the current route, the map will snap back to the current route after 15 seconds with no click activity. The keys for the functions to interact with the map are shown below for the 8700 and 7130 devices:



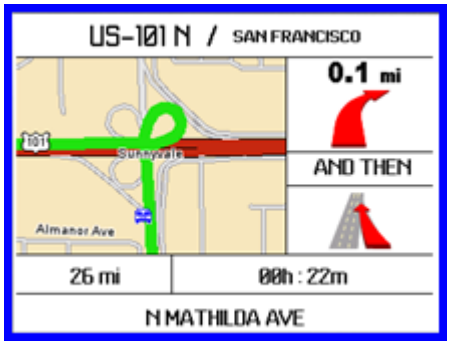
2D Map View

This view allows you to see how the road network is organized, similar to the perspective of a cartographer looking down on a map.

The name of the street you are currently on is displayed at the bottom of the screen. About 2 minutes before the next turn, the street name changes to the one you will turn onto. You can change this option in Preferences so that immediately after the prior turn, the name becomes that of the street you will turn onto.

For zoom and pan instructions, see page 20.

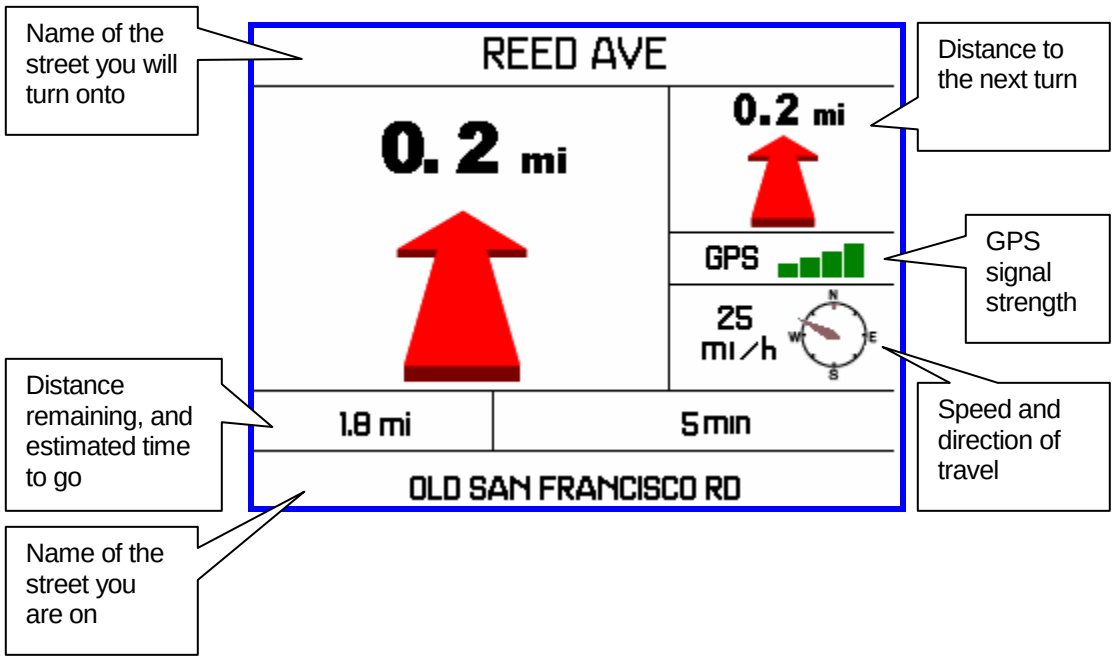
Turn Arrows and Corner Map



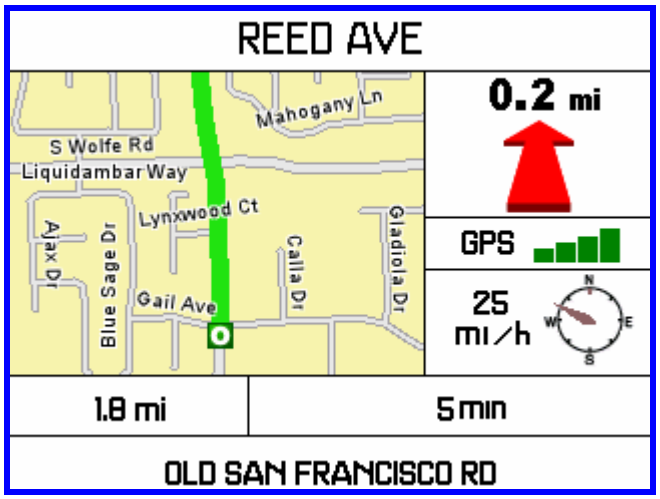
This view allows you to see the next two consecutive turns in your navigation route, along with a map with your route highlighted.

The name of the street you are currently on is displayed at the bottom of the screen. About 2 minutes before the next turn, the street name changes to the one you will turn onto. You can change this option in Preferences so that immediately after the prior turn, the name becomes that of the street you will turn onto.

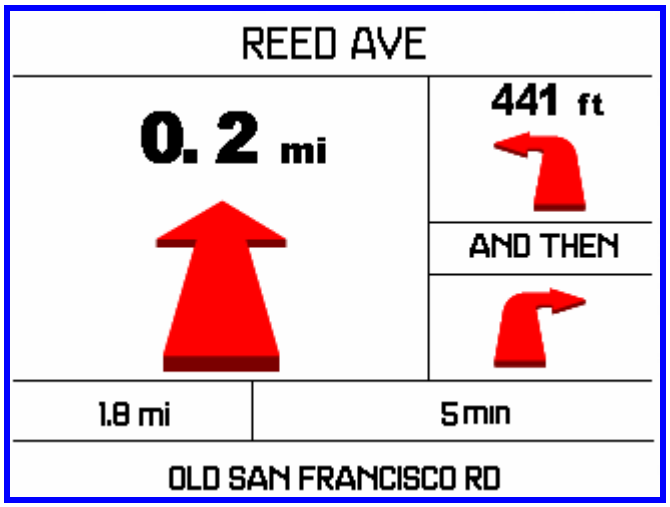
GPS navigation and Non-GPS directions screens have slightly different content as explained below. The large main turn type icon indicates which way you should turn when you reach the intersection.



The map is oriented so that the segment you are on will be drawn upward from the bottom of the screen so that you do not have to deal with a confusing North-oriented view. The main turn icon is fitted on the right as shown below.



When the next turn along the route almost immediately follows the turn indicated by the main turn icon, a second turn icon appears where the speed and heading information is shown below.



Eventually, you will see the destination arrival screen. This screen will show you how far it is to your destination and whether it is on the left or right side of the street or road.

When you arrive at your destination, press the trackwheel, and return to TeleNav Home menu.

Audible Messages

TeleNav delivers audible guidance messages as you drive. An informational message will be heard shortly after making a turn, provided that there is time to deliver it and the preparatory message that follows. The preparatory message will be heard no less than 30 seconds before reaching a turn, and the action message will be heard no less than 10 seconds before reaching the turn. The preparatory message may not be heard if the distance to go only allows time for the action message. The lead-time for these messages is increased proportionally to your

driving speed to allow more time for changing lanes on freeways than on surface streets. A Preference setting determines whether street names are included in the messages, or not. Enabling street names increases packet data usage.

Audio Replay

If you wish to hear an updated informational message for the current route segment, simply press the **Space** Key.

Miss a turn?

Whenever you miss a turn, turn the wrong way, turn too early or too late, or otherwise get off the planned route to your destination, TeleNav will automatically create a new route to your desired destination, audibly announce, "New Route," and give you a new set of instructions. If you realize you have gotten off the route, just keeping going. TeleNav will detect your "departure" and calculate a new route to get you back on track.

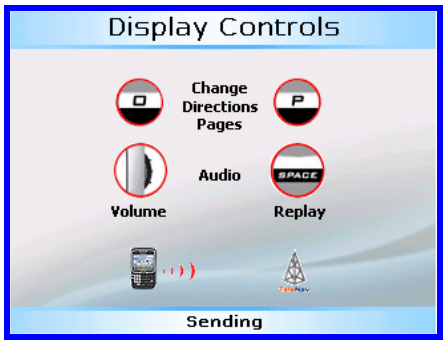
Please note that it takes about 15 seconds for TeleNav to update your route. If during this process you also make adjustments, TeleNav will probably have to contact its servers for another new route. Rerouting uses packet data, so it is advisable for you to try to stay on the route. Since TeleNav **GPS Navigation** requires the network, if you are off route and outside of your carrier's coverage area, you must return to coverage for **GPS Navigation** to work again.

Preview and Driving Directions Modes

You can enter the **Preview** mode from GPS Navigation by pressing the trackwheel and selecting Preview from the pop-up menu. If you specified "Set a different origin" to enter the **Driving Directions** mode, the behavior is similar.

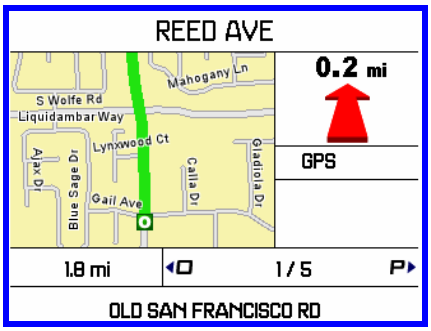
Before the first of several directions pages, TeleNav presents a screen describing the use of the keys to move through the directions pages, and the use of the SPACE key to play the associated audible message. Use the trackwheel to change the audio replay volume level.

On 8700, the O and P keys change the display pages. On the 7130, the QW and OP keys change the display pages.



The next screen will be the directions screen for the segment you are currently traveling. After you have looked ahead along the route, you can press the trackwheel to display a menu that allows you to choose from one of the following map views: **3D Map**, **2D Map**, or **Turn Arrows (And Corner Maps)**. You can also **Preview** your route (view upcoming turns), get a **Route Summary** (get text directions), or return to **TeleNav Home**.

The GPS quality indicator is not relevant or shown when operating in the Preview mode. Instead, a fraction is displayed showing the displayed page number as the numerator, and the total number of pages as the denominator. Use the trackwheel to scroll through the pages. Example (as shown): If you are on page 1 of 5 pages, the fraction will be 1 / 5.



Web address entry

Go to the TeleNav website, and log in using your account number and PIN. Then select **preplan my trip, maps, or driving directions**. Type in the address you want to go to and click on the submit link. The address will be validated and appear in the list of addresses further down the web page. To pull these addresses into your handheld, use the "Refresh List" option on the Recent Stops screen.

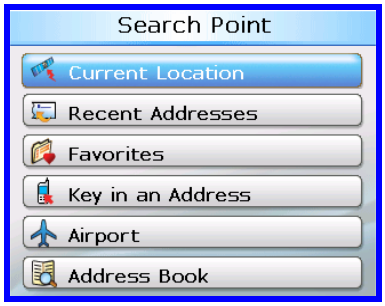
Address validation

Once you have entered the street address or selected the crossing street name, TeleNav will check to see if the address you entered can be found. This checking makes sure that: a) the address (door) number you entered is within the range of assigned numbers for the named street and b) when crossing street names are provided, the streets do actually cross. If either condition is false, or the address is too new to be found in the mapping database, the server will send a message to your handheld requesting you to correct the provided information. For example:

BIZ Finder

Using Biz Finder requires a TeleNav subscription.

Select **Biz Finder** and use the Address Selector screen, and perhaps the Address Input screen to help TeleNav determine where you want to search.



Once you have picked a point or an area, you can search for businesses or motor fuel prices.

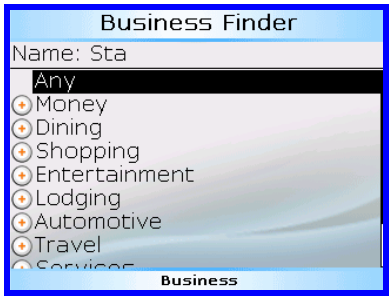
A business search requires entering part of the business name, selection of a category, or both.

Business Name Only

Enter a few letters of the business name in the first row of the form, scroll down to highlight the next line that reads, “Any,” and press the trackwheel to start the search.

In this context, “Any” means any business beginning with the name above.

If the name is left blank, you will be asked to enter part of the business name prefix. In this example, “sta” was entered as part of the business name.



Category Search

Do not enter any part of the business name in the first row of the form. Scroll down to one of the nodes of the category tree. Press the trackwheel to open the node exposing its branches. The indicator on the left will become a “-“ as shown for “Dining” in this example. Any listed branch that is preceded by a “+” can be expanded as well to expose lower level detail. Any listed category that is not preceded by a “+” is a leaf category that has no lower level break out. The first leaf listed will be “Any” allowing you to look for any business in the branch category above. Highlight a leaf category of your choosing, and press the trackwheel to start the search.

Name and Category Combined

You can perform a brand name search that is restricted to category. Enter part of the business name in the first row of the form. Scroll down to one of the nodes of the category tree. Press the trackwheel to open the node exposing its branches. Any listed branch that is preceded by a “+” can be expanded as well to expose lower level detail. Any listed category that is not preceded by a “+” is a leaf category that has no lower level break out. The first leaf listed will be “Any” allowing you to look for any business in the branch category above. Highlight a leaf category of your choosing, and press the trackwheel to start the search.

Example: Enter “sta” as the business name, scroll down to “Dining,” and press the trackwheel to expose the lower level branches. Select “Coffee/Café” and press the trackwheel to search for any Coffee/Café beginning with “sta.”

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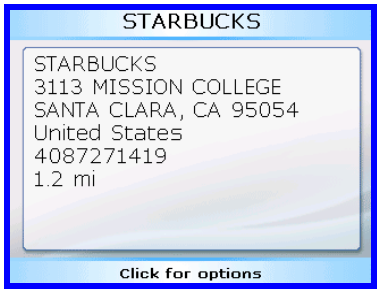
Picking a Business

If the search succeeds, you will be presented with a list of businesses that are near the search point, or within the search area you specified. For searches conducted around a point, the mileage (as the crow flies) from the point to the business is included. The last entry is the Next option – use ESCape to return to pages you have already seen.

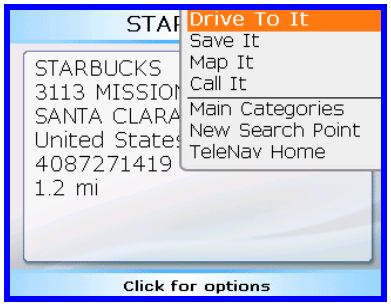
NOTE: If the search fails, a pop-up will be presented showing that nothing was found, and you have the option of accepting an expanded area search. If you do not act, the search will be expanded automatically. Searches do not expand beyond 24 km/15 miles from the initial reference point.

After you highlight and pick a specific business from the list of matches, you will see a Business Detail screen that shows: a) the name of the business, b) the street address, c) the phone number, d) the distance from the search point, and e) optionally more information about the business.

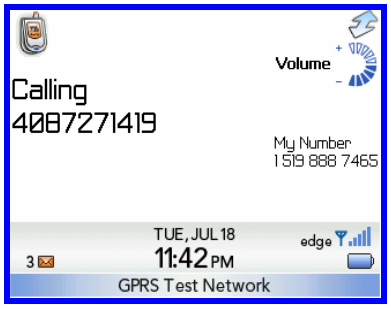


Press the trackwheel for the options that are: 1) drive to the address, 2) save the business address for later, 3) obtain a map around the business location, or 4) call it using your phone (requires a calling plan).

If you **Save It**, the address is added to the Recent Stops list. If you **Map It**, you will be presented with a map of the area surrounding the business address. The **Call it** feature is only present if a phone number is shown on the details page.



If you choose **Call it**, the phone number will appear on your phone's calling screen, and then the call will be placed. When the call ends, you will be returned to the Business Detail screen. The calling option will not be available if you are already on another call.



NOTE: Your BlackBerry Enterprise Server™ administrator can set voice network access policies to challenge your attempting to use this voice call feature, or deny it altogether. If challenged, you must grant TeleNav access to the voice network for this feature to work.

There are also application navigation options. You can go back and change the category used in the search, or change the anchor point (the address where the search is centered). You can also leave the BIZ Finder, and return to the TeleNav home menu.

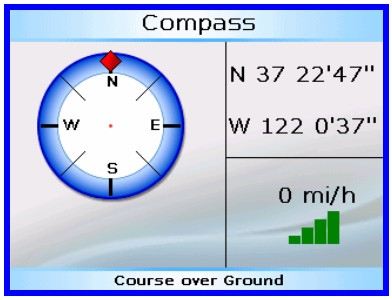
GPS Tools

If you select **GPS Tools** from the main menu, you will be taken to the **TeleNav Tools** submenu.

You can make a choice by highlighting the item, and pressing the trackwheel. Otherwise, press **ESCape** to return to the main menu.

Compass

If you choose **Compass**, you will see a display similar to a nautical compass. More correctly, it actually displays course over ground, the direction you are traveling if you are moving. The screen also provides current latitude, longitude, and speed. Using the main menu **Preferences**, you can select the format of the speed as miles per hour or kilometers per hour.

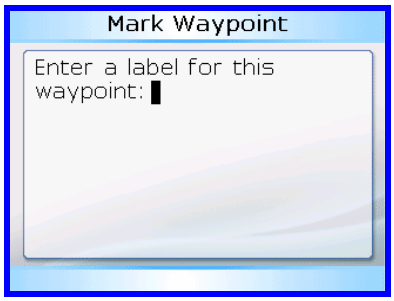


If no GPS data is available, “No GPS” appears instead of latitude and longitude.

Press **ESCape** to return to the **TeleNav Tools** submenu.

Mark a Waypoint

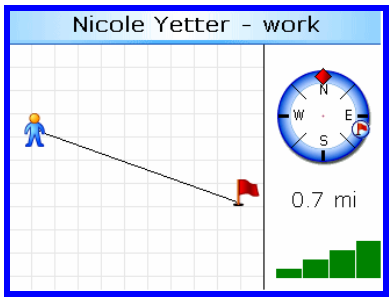
This menu option allows you to mark and label your current location for future reference. If you choose **Mark a Favorite** there will be brief activity to determine the GPS position, and then you will need to enter a label or accept the default label that is based on the current date.



After the waypoint is saved, you will be returned to the TeleNav Tools menu.

Relative Location

Selecting **Relative Location** allows you to see the spatial relationship of a selected remote point relative to your current location. The remove points are in lists of: a) **Recent Stops** (an address used for navigation, for example), b) **Favorite Addresses** that you labeled and marked to be saved, or c) marked **Waypoints**. Select the category, and then select a specific point (see the Recent Stops list above as an example). The handheld will try to get a GPS fix, and then display a plot showing your relative location to the selected point.



The "figure" is your location, and the flag is the selected point. The header text is a label derived from the selected point information. The view is North oriented, and the approximate distance to the selected point is shown. The green diamond on the perimeter of the course over ground (compass) indicator is the relative bearing from where you are to the selected item. If you are going straight toward the location, the green diamond will overlay the red diamond at the top of the indicator.

NOTE: The plot and distance will not be shown when there is no GPS data.

TIP: When you park your car in an open lot, mark its location as a favorite. Later you can use Relative Location to assist you in finding where you parked.

Deleting Favorites and Recent Stops

The TeleNav Tools provide separate selections for deleting Favorites and Recent Stops.

Pick the type of list from the TeleNav Tools menu, and then check those items you want deleted using the **SPACE** key. Press the trackwheel to expose a menu that allows you to delete the selected items, or navigate back Home.

Delete Recent addresses
718 Old San Francisco Rd
Nicole Yetter - work - 2975 SAN YSIDRO WAY
600 Park View Dr
20610 STEVENS CREEK BLVD
2975 SAN YSIDRO WAY
700 EL PASEO DE SARATOGA
West Target - 1725 HILLSDALE AVE
SPACE to select/deselect

When the list appears, move through the list with the trackwheel, and press SPACE to set the check boxes on the left. Then press the trackwheel to bring up the menu shown here.

"Select/deselect" works just like the SPACE key. "Invert selection" will uncheck all checked items, and check all unchecked items.

Then, you should choose "Delete checked items"

NOTE: There is no provision for recovering an unfortunate deletion!

Maps

This service will obtain and present a map around a selected or newly entered address. The Address Selector screen shown above is used to start the process of selecting an existing address, or entering a new one.

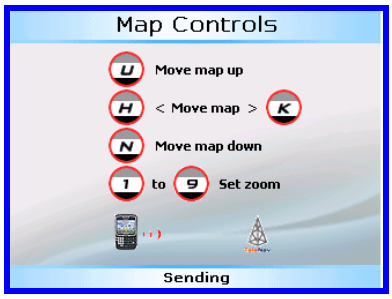
If you choose **Here** (your current location), there will be brief activity while TeleNav employs GPS to determine your location.

After you have selected or entered an address, there will be brief activity indicated by arrows appearing in the upper right corner of the display while the handheld obtains the map from the TeleNav servers.

The displayed map is always oriented with North towards the top of the screen. When you move (pan) or zoom, there may be brief activity to fetch the updated map.

On the 8700, The U H K and N keys move the map laterally according to their position relative to the J key. This is depicted on the information screen that is presented while the map is being retrieved, as in the example shown to the right.

On the 7130, the QW and YX keys move the map vertically, and the AS and L keys move the map horizontally. The 7130 information screen is not shown here.

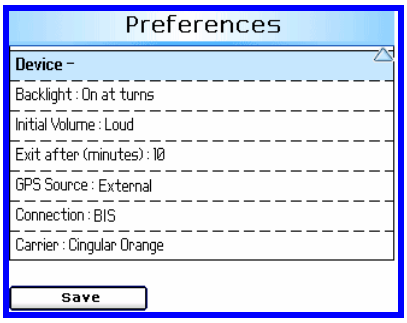


The numbered keys set the zoom level starting from level 3. The zoom level ranges from 1 through 9. If you are on zoom level 3, the fraction will be 3/9, as shown in the example on the right.

Press the trackwheel to show a pop-menu and select **Mark as Favorite** to create a new favorite based on the current position of the map cursor.

Preferences

If you select **Personalize TeleNav**, you can:



- Set the displayed **Distance units** to either feet and miles or kilometers and meters.
- Set the **Route type** to fastest or shortest, prefer streets or highways or pedestrian.
- Turn **Audible Street Names** On or Off.
- Turn **Default View** to 3D Moving Maps, 2D Moving Maps, Turn Arrows, or Arrows & Corner Maps.
- Set the next **Turn icon** to appear immediately after making the prior turn, or not until about 2 minutes before the next turn.
- Set the number of Finder search **Results per page**.
- Turn the **Backlight** On, Off or On at Turns.
- Adjust the speaker audio **Initial Volume** level.
- Set the number dialed when using Voice Call to dictate an address.
- Set the time in minutes after TeleNav is suspended before the application exits automatically.
- View **the Bluetooth Source**.
- Set **Connection** type, either BIS, Direct TCP or MDS.
- View the **Carrier** information.

NOTE: To change a Preference value, highlight the row using the trackwheel, and then press **SPACE** until the value you want is showing.

There are two **Voice Input numbers** listed. In some cases, calls placed to the 877 number do not carry Caller ID. When this happens you must enter your phone number followed by pressing the "#" key, and then enter your TeleNav PIN followed by pressing the "#" key so that TeleNav can assign the address you dictate to your account. If the automated attendant asks for account number in the geographical area where you most frequently use

TeleNav, you should try the 408 number. Ease of using the Voice Address Input system is probably a more important consideration than the minor change in your billing.

Help/About

The TeleNav Menu footer caption for Help/About is shown below on the left. The content of the Help/About screen is shown on the right.

TIP: Have questions about TeleNav? We have answers! TeleNav Customer Care is available 24 hours a day, seven days a week. For Customer Care, dial toll free 88-TeleNav-4.

Click the trackwheel and select the Call Customer Care option to dial TeleNav Customer Care directly.

He
TeleNav Home
Call Customer Care
Visit www.TeleNav.
on using TeleNav, and to purchase
accessories for your Blackberry.
No sound? Change your Profile from Vibrate
or Quiet to Default or Loud
For Customer Care, dial toll free
8883536284
TeleNav (c) 2002-2006 by TeleNav, Inc,
Santa Clara, CA
Map data provided by NAVTEQ, Chicago, IL.
Click to continue

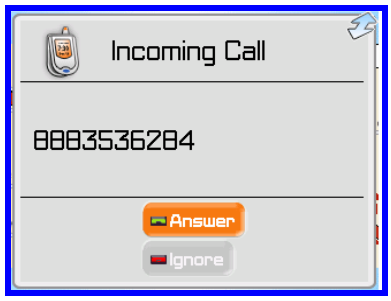
Activity Messages

Whenever the TeleNav application on your handheld needs to contact the TeleNav server, as it does when generating a route or map, it uses the carrier's data service. While it is using the data service, other services such as SMS 2-way messaging, and conventional cellular will not be available. Typically this interruption of other services will last no more than 20 seconds. When TeleNav is using data service to contact the TeleNav servers, it will present a message like: a) Reading GPS…, b) Waiting …, c) Sending …, d) Receiving…, e) Logging in…, f) Personalizing …, g) Loading …, and h) Storing ... There is also a small network activity indicator comprised of two arrows in the upper right corner of the display that will appear when you change map scale factor.

Taking an Incoming Call

When your handheld receives an incoming call, it will ring and display a screen that allows you to take or ignore the call. If you take the call, TeleNav will be operating but "suspended." After the call, press the ESCape button to end the call. At this point, TeleNav should resume from its suspended state. If you are navigating and have gotten off the route, TeleNav will sound a deviation jingle and obtain a new route for you.

NOTE: When TeleNav briefly uses the data network, incoming calls may be blocked.

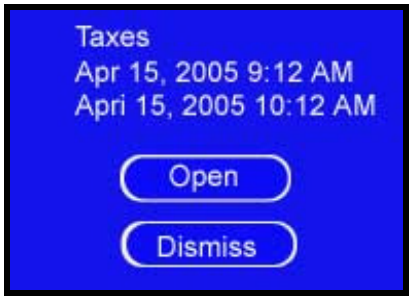


Switching Between Applications

Press the ALT key and the ESCape button concurrently to launch the BlackBerry application switcher. This will allow you to leave TeleNav running in suspended mode while looking at your e-mail, or using another application. When you use the switcher to return to TeleNav, it will move to the foreground and resume operation. If while another application was in the foreground you have left the navigation route, TeleNav will sound a deviation jingle and obtain a new route for you.

Calendar and e-Mail Events

When a scheduled calendar event occurs, or an e-mail message arrives while you are using TeleNav, a pop-up notification will appear similar to that shown on the right. You can interact with the Calendar or e-mail event by Opening it, or you can Dismiss it. If you Open the application associated with the notification, TeleNav will be suspended while you are interacting with the other application, but it will still be navigating. However, if you get off route, TeleNav will not be able to recover until you leave the other application. TeleNav does not use the network while it is suspended.



9. Removing TeleNav from your BlackBerry

TeleNav can be removed from your BlackBerry quickly right from the device. Follow these steps to remove TeleNav from your BlackBerry.

NOTE: You should always remove TeleNav before completing a reinstall of the TeleNav application.

1. Turn on the device.
2. Hotkey to the BlackBerry main menu (Alt + Esc).
3. Go to Options, depending on your hardware you may need to first enter Settings.
4. In the Options screen, highlight *Applications* and click the trackwheel once. Depending on your hardware you may need to first enter Advanced Options.
5. Press the Enter key or click the trackwheel once to expose the applications list.
6. Highlight TeleNav for the BlackBerry and press the trackwheel once.
7. Highlight *Delete* from the menu and press the trackwheel.

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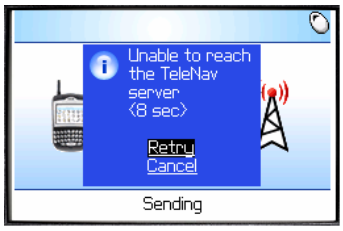
10. Error Conditions

Unable to reach TeleNav server



You may see this message for several different reasons: a) your data plan is not active, b) your WIX services are not enabled, c) you are outside of coverage, d) the data network is currently experiencing difficulties, or e) the TeleNav server is not acknowledging your phone's attempt to communicate.

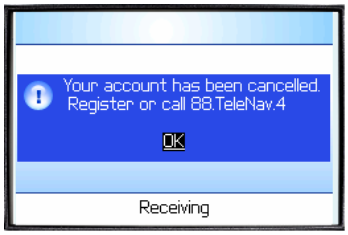
You should call your carrier's Customer Support to see if it is a through d, and TeleNav customer care at 888-353-6284 to see if it is item e.

NOTE: Please see Appendix A for carrier support information.

Account Not Found

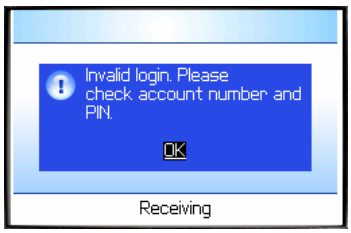
You do not have a valid TeleNav account. Visit www.TeleNav.com to order TeleNav or contact TeleNav Customer Care at 1-888-353-6284.

Account Cancelled



You do not have a valid TeleNav account. Visit www.TeleNav.com to order TeleNav or contact TeleNav Customer Care at 1-888-353-6284.

Invalid Login



Your account number is your 10-digit carrier phone number beginning with area code. Your PIN is a 4-digit number you assign. If you have forgotten your PIN, call TeleNav Customer Care at 1-888-353-6284.

Please input password

You must provide a four digit personal identification number (PIN) along with your carrier telephone number to log into TeleNav.

Please input phone number

You must provide your carrier telephone number to log into TeleNav.

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Password needs 4 digits

You must provide a four digit personal identification number (PIN) along with your carrier telephone number to log into TeleNav.

Phone number needs 10 digits

Enter the entire 10 digit phone number, not prefixed by 1.

Your account has expired

You do not have a valid TeleNav account. Order TeleNav by visiting www.TeleNav.com or by calling TeleNav Customer Care at 1-888-353-6284.

Account in use

Someone has attempted to fraudulently use your account. You will need to change your PIN, and attempt to log in again.

Trial Expired

The trial period for your account has expired. Order TeleNav by visiting www.TeleNav.com or by calling TeleNav Customer Care at 1-888-353-6284.

Radio Off

This may appear if you start TeleNav before the radio has acquired the carrier network, or it may be because you have turned the radio off. In the first case, try again in about 15 seconds. In the second case, exit TeleNav and turn the radio on by highlighting the radio tower icon. Then press the trackwheel. You can also simply make a call to start up the radio.

TIP: You can also ALT-ESCape to go to the main menu to turn the radio on.

Radio Signal Weak

If the carrier network signal is weak, move to an area where reception is better and try the function that requires network access again.

Low battery

The GPS will not work if the handheld's battery charge level is below about 15%. Starting with a freshly charged standard battery, we have used TeleNav for around 4 hours before it became necessary to connect the charging cable. If you get a low battery warning, connect a charging cable as soon as possible. In some cases, you may need to wait a while for the battery to become sufficiently charged so that the GPS receiver will work.

No GPS Data

Place the Bluetooth GPS in an area that has a good view of the open sky, and then try to use TeleNav again after exiting and restarting it.

GPS Signal Weak

If the Bluetooth GPS signal reception is weak due to shadowing within the vehicle or due to buildings, trees, overpasses, etc., validation will fail, producing a screen that will advise you that the GPS signal is weak and you should move to an open area. It is suggested that you move to an area with a clear view of the sky, and then click "**RETRY**". If you're still having problems you can still driving directions by pressing the NONGPS key while the GPS receiver is trying to determine your current location as the origin point.

TeleNav Not Available

If you get an advisory message that TeleNav is not available, you should EXIT the TeleNav application, and then restart it. If the problem recurs, it may be due to a temporary TeleNav server outage.

TeleNav Encountered An Error

TeleNav is having technical problems with the specific request you made. This can be due to an address that it cannot find, or mapping data that does not allow routing from where you are to where you want to go. In this case, try to use a nearby address.

Unable to generate a route

TeleNav could not generate a route between the two endpoints of the route. This may be a temporary error if you are using GPS to establish the origin. In rare cases it is due to errors in the map data around the destination.

Favorites list is full

You are trying to add another Favorite to a list that already contains 26, the maximum amount allowed. Use the TeleNav Tools to delete addresses from the Favorites list.

Waypoints list is full

You are trying to add another Waypoint to a list that already contains 26, the maximum amount allowed. Use the TeleNav Tools to delete waypoints from the Waypoints list.

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11. Exiting TeleNav

If at anytime you wish to exit TeleNav, press the trackwheel to present the options menu. Generally, there is an option that will take you go to the main TeleNav menu. From the TeleNav menu press the ESCape button to exit.

12. The TeleNav Website

Using the features described below requires you to log into the website using your carrier telephone number (TeleNav account number), and TeleNav PIN. When you log in, you will be taken to the Account Management page.

Account Management

Within Account Management, you will find links that allow you to change your e-mail address and PIN and set your home and work addresses. The home and work addresses are not used by TeleNav on the 8700 since it has local management of Favorite Addresses.

Preplanning

Click the Preplan My Trip link to enter new addresses for use within TeleNav on your phone. You can also use this page to remove addresses you no longer need. After you use website preplanning, be sure to use REFRESH LIST on your phone so that TeleNav can learn about the changes.

Customer Service

If you need to reach customer service, you can use the Contact Us link on the right side of the web page after signing in. You can also call us at 888-353-6284 (toll free) for most service issues.

If you need to migrate your TeleNav account to a different phone number, please call TeleNav Customer Care at 888-353-6284. For security reasons, you cannot perform this change unassisted.

13. FAQ's

How do I increase or decrease the voice prompt volume and control the backlighting?

The backlight and speaker volume levels can be controlled from within TeleNav's Preferences. If the speaker volume is set to at least mid-range and you are still not receiving audio prompts verify that your handheld profile is not set to vibrate or quiet. To change your profile settings, highlight the Profiles icon that looks like a loudspeaker and press the Enter key.

Why do I need the data service?

The data plan allows you to access nationwide routes, maps, and Finder content from the TeleNav servers using the data communication features of your handheld. These services are different from your cellular airtime.

To order a data plan, please contact your carrier customer service.

How long after I apply for the data service until I can use my TeleNav system?

Generally, it takes until the following business morning before the data services are fully provisioned. If you already have data services it should be no more than 4 hours before an added TeleNav plan is active.

Does TeleNav use up my voice plan minutes?

TeleNav uses data to provide the navigation function. Using data does not use any of your voice minutes. However, calling the Voice Address Input System does use about 75 seconds per address entered, and this includes the Voice Call feature internal to the TeleNav application.

How accurate is the GPS?

GPS accuracy can range from 20m to 100m, however most of the time the GPS is accurate to less than 50 meters.

What is ideal GPS environment?

The GPS requires an open, clear view of the sky. Buildings, covered parking areas, tunnels and dense foliage can cause the GPS receiver to be unable to locate itself or have an extended initialization time (time to first fix).

If you are parked in a covered parking lot or near a tall building, it is recommended that you move into an open area and then begin to use the TeleNav service.

How do I know that the GPS has a signal?

The TeleNav application on your handheld will alert you if the GPS does not have a valid signal. If this happens, move to an area where there is a clear view of the sky so the receiver can hear the GPS signals from space.

Why does the GPS not work near buildings and other tall objects?

The GPS uses satellite signals from space to find out where it is. Therefore it needs a clear view of the sky. Tall buildings and other objects that block the receiver's view to the sky make it infeasible to determine your location. Sometimes the satellites are not overhead but near the horizon; in these cases the GPS must have a clear view of the horizon.

14. Customer Support

Send an e-mail with your questions or comments to the appropriate company's Customer Service Department, or enter a comment through the website. We monitor your e-mails and will promptly reply to your inquiries.

Technical Support

Phone: 888-353-6284 (toll free)
care@TeleNav.com

15. TeleNav Services Warranty

The content and Java application services provided by TeleNav is provided "as is" and "as available" without warranties of any kind, either expressed or implied, including but not limited to any warranties of merchantability or fitness for particular use, or non-infringement. You acknowledge that your use of the TeleNav service is at your sole risk and you agree that the service and the information provided are without warranty of any kind by TeleNav.

TeleNav does not warrant the availability, accuracy, completeness, currentness, or reliability of the services available from TeleNav, or the service itself, unavailability, errors, omissions or inaccurate data may result from unreliable data, due to equipment failure or other technical problems beyond the control of TeleNav, and TeleNav does not warrant the services in any respect due to such circumstances beyond its control.

Although certain information provided to you by TeleNav may be obtained or compiled from sources TeleNav believes to be reliable, TeleNav cannot and does not guarantee the accuracy, validity, kindness, or completeness of any information made available to you for any particular purpose.

Under no circumstances, including negligence, will TeleNav or any of its affiliates, directors, officers or employees, or any third party be liable for any direct, indirect, incidental, special or consequential damages that results from your use or your inability to use the services. You acknowledge that this limitation applies to all content information or other services available from TeleNav, and whether or not TeleNav has notice of the possibility of such damages, and whether or not to circumstances giving rise to such damages may have been within the control of TeleNav.

Some states do not allow the exclusion of certain warranties, so some of the above exclusions may not apply to you. In those states, liability is limited to the fullest extent allowed by law.

By using the service, you agree to indemnify TeleNav and its parents, subsidiaries, affiliates, officers, and employees and hold them harmless from any and all claims and expenses, including reasonable attorney's fees, asserted third party due to, or arising out of your use of the service and the site.

TeleNav Inc.
2975 San Ysidro Way
Santa Clara, CA 95051

Phone: 408.245.3800
Fax: 408.245.0238
www.telenav.com

16. Cingular Wireless Support

For Cingular BlackBerry Customer Support, please call 1-800-304-3044 and select option 1.